# City of Walla Walla

## Stormwater Management Program Plan

## 2020

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March 4, 2020

# Table of Contents

# Section 1 – Introduction

## Regulatory Requirements

### Overview

The City of Walla Walla (City) is subject to the following federal and state water quality regulations related to stormwater discharges to surface waters and groundwater:

- National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit, as required by the federal Clean Water Act (CWA) and the Washington State Water Pollution Control Act; and
- Underground Injection Control (UIC) Rule, as required by the federal Safe Drinking Water Act (SDWA) and the Washington State Underground Injection Control Program.

An overview of these regulations is provided below. Subsequent sections of this plan describe each of the Stormwater Management Program components. Each section provides a brief overview of the regulatory requirements along with a brief summary of the status of current City activities and a description of activities planned to be implemented in 2020.

Besides the regulatory requirements designed to preserve and protect water quality in our surface and groundwater, the City is responsible for managing the stormwater utility and making capital improvements to our stormwater infrastructure to ensure it continues to function as designed.

### NPDES Phase II Municipal Stormwater Permit

The *Eastern Washington Phase II Municipal Stormwater Permit* (Permit) was originally issued by the Washington State Department of Ecology (Ecology) on January 17, 2007 and became effective on February 16, 2007. That Permit was modified on June 17, 2009 and covered a five-year period that expired on February 15, 2012. On August 1, 2012, Ecology reissued the 2007 Permit without modification with an expiration date of July 31, 2014. Ecology reissued the last version of the Permit which became effective on August 1, 2014 and expired on July 31, 2019. The current version of the permit was reissued by Ecology on August 1, 2019 to cover the next five-year period ending July 31, 2024. The current permit does include new requirements that covers updated mapping and outfall inventory, public education and outreach metrics and construction inspections. As of February 2020, the current stormwater permit for Eastern Washington and Western Washington has been challenged by appeals to the Pollution Control Hearing Board (PCHB). Ecology has informed all permittees to we are obliged to continue to manage our programs under the new permit until such time as the appeals have been ruled on by the PCHB. Hearings are scheduled to be held in October 2020.

The revised Permit outlines stormwater program activities and implementation milestones that entities covered by the Permit (Permittees) must follow to comply with the federal CWA. All Phase II jurisdictions are expected to develop and implement a Stormwater Management Program (SWMP) that includes the required activities (minimum control measures), implement those activities within the required timeframes of the Permit term, and submit Annual Reports to Ecology each year to document progress towards complete program implementation.

The 2007 Permit automatically applied to cities and counties with populations less than 100,000 located within or partially within a federally designated Urbanized Area and that operate a municipal separate storm sewer system (MS4) that discharges to a "water" of Washington State (i.e., a river, stream, wetland, etc.). Urbanized Areas are defined as population centers with greater than 50,000 people and densities of at least 1,000 people per square mile, based on the 2000 census. For subsequent permits, the Urbanized Area is based on the most recent federal census.

Ecology was required to evaluate whether to extend permit coverage to cities with populations of 10,000 or more located outside Urbanized Areas. These communities were referred to as "Bubble Cities". Designation criteria included considerations such as discharge to sensitive waters, high population density, high growth or growth potential, contiguity to an Urbanized Area, significant contribution of pollutants to waters of the US, or ineffective protection of water quality by other programs. The City of Walla Walla was designated by Ecology as a Phase II Permittee "Bubble City" in 2007 based on its population of 30,900. The population for 2019 was estimated to be 34,240.

## SWMP Components

The Permit is broken down into six components, and the implementation and enforcement of the six components is collectively referred to as a municipality's SWMP. The six components are:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management for New Development and Redevelopment
6. Municipal Operations and Maintenance

In addition to these six minimum control measures, the Permit also requires the following:

- Compliance with Total Maximum Daily Load (TMDL) Requirements
- Monitoring and Assessment
- Reporting Requirements

The SWMP is designed to reduce the discharge of pollutants from municipalities to the "Maximum Extent Practicable" (MEP), to satisfy the state requirement to apply "All Known, Available, and Reasonable methods of prevention, control and Treatment" (AKART) prior to discharge, and to protect water quality. The Permit requires that specified activities from each category above be completed in order to achieve full compliance by the end of the permit term or as otherwise specified in the permit.

## Underground Injection Control Program

In addition to the Permit, the City must also address the requirements of the state's UIC program. This program, as required by the federal SDWA, is intended to protect underground sources of drinking water from contamination by waste fluids, including the infiltration of polluted stormwater.

A UIC well is defined as a man-made subsurface fluid distribution system designed to discharge fluids into the ground and consists of an assemblage of perforated pipes, drain tiles, or other similar mechanisms; or a dug hole that is deeper than the largest surface dimensions. The Washington State UIC Rule (Chapter 173-218 WAC) went into effect on February 3, 2006. In 2019, Ecology revised its technical guidance document for UIC wells entitled *2019 Updates to UIC Well Requirements* (February 2019, Publication #19-10-014) and updated the UIC well guidance and BMP requirements in the newly revised Stormwater Management Manual for Eastern Washington (SWMMEW) dated August 2019 (Publication #18-10-044).

The purpose of the UIC program is to protect groundwater quality by: (1) preventing groundwater contamination by regulating the discharge of fluids into UIC wells and (2) satisfying the intent and requirements of Part C of the SDWA and the Washington State Water Pollution Control Act (Chapter 90.48 RCW). There are two main requirements of the UIC program:

1. A non-endangerment performance standard must be met, prohibiting injection that allows the movement of fluids containing any contaminant into groundwater. In Washington, all groundwater is considered a potential source of drinking water.
2. All UIC well owners must provide inventory information by registering their wells with Ecology.

## Non-Regulatory Requirements

### Administration of the Stormwater Utility

Besides the regulatory requirements of the permits, regulations and laws discussed above, the City's overall stormwater management program includes administration of the stormwater utility. The stormwater management program is funded almost exclusively by the revenue collected through stormwater utility fees charged to every developed property in the City. These fees fund not only the regulatory program requirements but also normal operation and maintenance of the stormwater system and stormwater capital improvement projects. The funds are supplemented from time to time with state grants although they are primarily for capital projects.

Administration of the utility includes establishing stormwater utility rates and the rate structure. It also involves establishing the methodology for calculating stormwater fees for all properties and updating these fees when conditions on the property change. The City enacted the stormwater management utility in 1999 and a rate structure based on Equivalent Residential Units (ERUs) calculated from the impervious surface area on the property. The Stormwater Management Utility – Regulations and Rates is codified in the Walla Walla Municipal Code (WWMC) Chapter 13.06. The rate for 2020 is $13.00/ERU.

### Capital Improvement Projects

As part of the development of the City of Walla Walla Comprehensive Management Plan (July 28, 2015), a Stormwater Capital Improvement Plan was prepared in July 2014. This plan was prepared to address drainage problems in the City. Besides identifying these problem areas, the plan includes

proposed solutions, hydrologic calculations, estimated project costs and a proposed schedule. Included in this plan are the UIC retrofit projects discussed in Section 11.

In addition to the capital improvement projects in problem drainage areas, the stormwater utility also provides funding to repair, replace and retrofit stormwater facilities on the City's other capital projects such as Infrastructure Repair and Replacement Program (IRRP) and the Transportation Benefit District (TBD) projects. The IRRP also provides some funding for capital stormwater improvements on IRRP projects.

# Section 2 – Public Education and Outreach

### Regulatory Requirements

The Permit requires the City to develop and implement a formal Public Education and Outreach (PE&O) Program designed to educate the target audiences about the impacts of stormwater discharges to water bodies and the steps to take to reduce pollutants in stormwater. The City's outreach and educational efforts must be targeted and presented to specific audiences within the community. These include:

- The general public, including homeowners, teachers, and school age children, about the importance of improving and protecting water quality, impacts of stormwater discharges and how to avoid, reduce and eliminate them, and actions they can take to improve water quality. Additionally, the Permittee must consider delivering these messages in languages other than English, based on the target audience's demographic.
- Businesses and the general public about illicit discharges and how to prevent them.
- Engineers, design professionals, construction contractors, developers, and development review staff and land-use planners about technical standards, the development of stormwater site plans and erosion control plans, low impact development (LID) practices and Best Management Practices (BMPs) for reducing impacts from stormwater runoff at development sites.
- In addition, each Permittee must measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area no later than December 2021.

### Status of Existing Activities

A Public Involvement and Education Plan (PIE Plan) was prepared in 2011 which outlines recommendations for public involvement and education activities to be conducted on an ongoing basis to inform the community about the impacts of stormwater discharges to water bodies and the steps to take to reduce pollutants in stormwater.

City staff hosts the annual Public Works Week event at the City Service Center where local school-aged children are introduced to the wide range of activities performed by the Public Works Department including a presentation on the stormwater program. In 2019, 340 elementary school students participated in our 2-day event. One of the City street sweepers has public education

messaging explaining that stormwater in the streets drains directly to surface waters. Almost 100 storm drain markers were installed on storm drains in the downtown and newly annexed areas in 2019 by City staff. These "Drains to Stream" decals have been installed in each of the past several years on storm drains in an effort to inform anyone who takes notice that our storm drainage inlets and catchbasins drain to streams or groundwater and care should be taken not to allow anything but rainfall to flow down these drains. Stormwater educational materials are always available on our website and have been distributed occasionally to utility customers through utility bill mailings and the At Your Service insert in the local newspaper. Utility bill messaging was sent out to customers in July 2019.

In 2019, City staff participated in the local Return to the River Festival where information was provided to the general public on the importance of improving and protecting water quality, impacts of stormwater discharges and how to avoid, reduce and eliminate them, and actions they can take to improve water quality. A total of 33 members of the public stopped by the booth to ask questions and receive information. Information on stormwater requirements and resources including LID training courses, Certified Erosion and Sedimentation Control Lead (CESCL) certification classes and stormwater BMPs for homeowners is posted on the City's website. An email distribution list of local design professionals is maintained and information on training opportunities and the Construction Stormwater General Permit is distributed to them. A training workshop for local engineers, design professionals, and developers was hosted by the City and the Department of Ecology in May 2019 to provide information on the updated Stormwater Management Manual for Eastern Washington which was revised and finalized in 2019. For more information on the PE&O activities in 2019, please refer to Appendix A at the end of this document.

Information letters have been sent to creekside property owners in the past about their responsibility to keep creeks unobstructed and to property owners with swimming pools regarding the proper disposal of chlorinated pool water. Information is maintained on the City stormwater website for targeted audiences such as restaurant owners, lawn care businesses, gas stations and car care businesses and construction contractors on how they can prevent stormwater pollution.

In addition to the specific events and activities described above, information on the stormwater system, the impacts of stormwater and illicit discharges to our receiving waters and the importance of protecting water quality in our receiving waters is provided to the general public, businesses and contractors when responding to and investigating reports of illicit discharge reports. Also, information on the stormwater system, stormwater design requirements and information on requirements to prevent erosion and sedimentation on construction sites is provided to design engineers and construction contractors during pre-application meetings, site plan review and construction inspections.

### Activities Planned in 2020

- Public Works Week presentation to school-aged children (May).
- Return to the River presentation (May).
- Maintain stormwater information on City website.

- Continue emails to design professionals with information on training opportunities and other stormwater design and construction subjects.
- Install storm drain decals on recently completed City capital projects.
- Informing the public, businesses, contractors and design engineers during investigation of illicit discharges, pre-application meetings, site plan review and construction inspections.

# Section 3 – Public Involvement and Participation

## Regulatory Requirements

The Permit requires the City to adopt a program or policy directive to provide ongoing opportunities for public involvement and participation in the decision making process on implementation of the stormwater program through advisory panels, public hearings watershed committees, participation in developing utility rate structures or other similar activities. The public involvement and participation program implemented by the City must comply with applicable state and local public notice requirements and must also include provisions for consideration of public comments. The City is also to create opportunities for the public to provide input during the decision-making processes involving the development, implementation, and update of the City's SWMP Plan and adoption of all stormwater ordinances. The City is required to make the latest version of the Annual Report and SWMP Plan available to the public and post both on the City's website by May 31 of each year.

## Status of Existing Activities

The City has officially adopted a public involvement policy to create opportunities for the public to provide input during the decision-making process involving the management of the stormwater program including the development of all required ordinances. A Public Involvement and Education Plan (PIE Plan) was prepared in 2011 which outlines recommendations for public involvement activities. Public notices are issued, and public comments are considered for the adoption and revision of stormwater ordinances as required by state and local requirements.

In 2009, the City of Walla Walla Stormwater Implementation Plan was developed which served as the City's SWMP Plan. The City conducted an Open House in May 2013 to solicit public input during development of the Comprehensive Stormwater Management Plan. This plan was also presented to the City Council in September 2015. In 2016, a separate SWMP was prepared and published and is updated annually following a request for public input. The Annual Reports and current SWMP Plan are posted on the City's website.

The Water and Wastewater Advisory Committee is a citizen's advisory committee that was created to provide input to City staff and the City Council on the administration and management of the water and wastewater programs. In 2014, the stormwater program was added to this committee's oversight responsibilities. The committee meets monthly and the City Stormwater Coordinator attends and provides information on stormwater issues and the status of stormwater programs. This committee was heavily involved in 2015 during the development of the Comprehensive Stormwater Management Plan and the Utility Rate Study which served as the basis for the establishment of stormwater utility rates for 2016-2021. In 2019, several presentations on the latest Stormwater Utility Rate Implementation Plan and the Green Stormwater Infrastructure Plan were provided to solicit input from this committee as well as the City Council Finance Committee, the Parks and Recreation Committee and the full City Council on seven separate occasions.

In 2016, the City began a project to revise sections of the municipal code related to stormwater primarily driven by permit requirements related to allowing for Low Impact Development practices and techniques. We also took the opportunity to update definitions and terminology for consistency throughout the code and consistency with the Permit and the Stormwater Management Manual for Eastern Washington (SWMMEW). This project also included code revisions to allow for the recovery of plan review and inspection costs associated with private development, a review of the stormwater utility rate structure and methodology and development of a Stormwater Design Standards Handbook. Seven meetings were held throughout this process in 2017 to gather input from the public and stakeholders. Work on the code revisions was completed in December 2017 and adopted by City Council.

The Stormwater Coordinator participates in regional meetings with stormwater program representatives with the City of College Place and Walla Walla County to discuss stormwater permit issues pertaining to each of us, such as the new Total Maximum Daily Load (TMDL) special conditions included in the revised Permit. These meetings are expected to continue on a regular bi-monthly or quarterly basis through 2020. For more information on the Public Involvement activities in 2019, please see Appendix B at the end of this document.

In addition, the City maintains a website which includes a link to provide feedback on any issue including stormwater management. The City also maintains a system which provides the public the opportunity to sign up for notifications by email of any issues related to a variety of subjects including an option to select to be notified of and provide comments on any stormwater issue.

### Activities Planned in 2019

- Continue participation with the Water and Wastewater Advisory Committee.
- Solicit input from Water and Wastewater Advisory Committee and the public on any proposed changes to stormwater utility rate structure and methodology for calculating stormwater fees (See Section 12).
- Maintain link on City website for public feedback on any stormwater management issue.
- Notify the public signed up for email notifications of any stormwater issues to solicit input and comments.
- Solicit public input in November for the 2021 update to the SWMP Plan.
- Post 2019 Annual Report and 2020 SWMP Plan on City website by May 31, 2020.

# Section 4 – Illicit Discharge Detection and Elimination (IDDE)

## Regulatory Requirements

The Permit requires the City to implement and enforce a program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into its MS4. Minimum performance measurements are:

- Maintain and periodically update a map of the MS4 showing (1) the location of all known outfalls (noting pipe size and pipe material) and discharge points; (2) receiving waters other than ground;(3) areas served by the MS4 that discharge to the ground; (4) permanent stormwater facilities that are owned and operated by the Permittee; (5) all connections to the MS4 authorized or approved by the Permittee after August 1, 2019; (6) all known connections from the MS4 to a privately owned stormwater system; (7) connections between the MS4 owned and operated by the Permittee and other municipalities or public entities; (8) provide maps and mapping information to Ecology and any other entity that requests it , and (9) maintain this map in an electronic format with fully described mapping standards.
- Effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges to the MS4.
- Implement an ongoing program designed to detect and identify illicit discharges, illicit connections and spills into the MS4 which includes field assessing at least 12%, on average, of the MS4 within the Permittee's coverage area to verify outfall and discharge point locations for detection purposes.
- Train staff who are responsible for the identification, investigation cleanup and reporting of illicit discharges and spills to conduct these activities.
- Track and maintain records of the activities conducted to meet the requirements of this section of the Permit.

## Status of Existing Activities

The City developed and adopted Ordinance 2010-01 on January 13, 2010 to prohibit illicit discharges and illicit connections and authorize enforcement actions. This ordinance is codified in the WWMC Chapter 13.15 and minor revisions were made in 2017 (Ord. 2017-45) as part of our municipal code review project. In 2011, the City completed an IDDE Program Manual which included a stormwater drainage system map and procedures to detect, investigate and address illicit discharges. The City has a complete map of its MS4 in its GIS and continually updates it as part of an on-going process. In 2014, the Streets Division collected field data on all inlets, catch basins and bubble-ups which was uploaded into GIS. Since 2018, Streets Division has employed the use of cell phones and tablets to more accurately capture and maintain cleaning, inspection and detection information while in the field.

A hotline is maintained by the City for reporting spills and other illicit discharges. The phone number is listed in the phone book under the title "Stormwater Problems" and it is also posted on the City's website within the stormwater page. Reports from the hotline as well as other City staff and the general public are provided to the City Stormwater Coordinator. Reports are investigated

and appropriate action is taken to eliminate confirmed illicit discharges including informal compliance actions such as public education and technical assistance. Records of all IDDE reports and follow-up actions taken are maintained by the City Stormwater Coordinator.

In 2011, the City conducted an Outfall Reconnaissance Inventory and Receiving Water Assessment on Mill, Yellowhawk and Garrison Creeks and completed the same work on all remaining receiving waters in the City in 2013. IDDE training was provided to City staff in 2011. During the last permit cycle (2014-2019), City staff conducted an inspection of the concrete portion of Mill Creek in 2017 which has a high percentage of all outfalls in the City since it runs through the downtown area. In 2018, City staff completed the inspection of Mill Creek as well as Butcher and Barber Creeks and Owen Spring which is estimated to amount to 52 percent of the MS4. IDDE refresher training was provided in 2019 to Streets and Engineering staff as part of their Stormwater training.

### Activities Planned in 2020

- Continue to maintain and update map of the MS4 in GIS.
- Investigate reports of observed illicit discharges and take appropriate and timely compliance actions to eliminate them as necessary.
- Conduct field assessments on Bryant and Lincoln Creeks to verify outfall locations and detect illicit discharges.
- Maintain hotline for public reporting of spills and other illicit discharges.
- Provide targeted refresher IDDE training to Streets, Water and Parks and Recreation and staff.

### New Permit Requirements

- The new permit requires the reporting of illicit discharges on an Ecology web application as well as keeping this information in a format that can be reported/provided to interested individuals at the local level.

# Section 5 – Construction Site Stormwater Runoff Control

## Regulatory Requirements

The Permit requires the City to implement and enforce a program to reduce pollutants in stormwater runoff to its MS4 from public and private construction projects that disturb one acre or more or projects that are part of a common plan of development or sale that disturb one acre or more. This component of the SWMP requires that the City: (1) implement an ordinance that requires erosion and sediment controls during construction-phase work, including enforcement actions to ensure compliance; (2) implement procedures for site plan review, including review of Stormwater Pollution Prevention Plans (SWPPPs) prior to construction; (3) implement procedures for site inspection and enforcement of construction stormwater pollution control measures; (4) provide adequate training for all City permitting, planning, review, inspection, and enforcement staff; (5) provide information to construction site operators about training available on how to install and maintain erosion controls and stormwater requirements; (6) maintain records of activities related to site plan review, inspection, enforcement and application of the Erosivity Waiver. Specifically, the Permit requires the City to review SWPPPs and inspect all construction sites on projects that meet the above-referenced one-acre threshold at least once during the construction, as well as once prior to ground clearing activities that are part of construction.

## Status of Existing Activities

The City adopted a construction and post-construction stormwater ordinance (Ord. 2010-25) on May 26, 2010 that pertains to construction site erosion and sediment control and includes provisions for the enforcement of non-compliance. This ordinance is codified in the WWMC Chapter 13.16 and revisions were made in 2017 (Ord. 2017-45) as part of our municipal code review project. The City requires a Stormwater Report and SWPPP (if applicable) on all new development and redevelopment projects that meet the above-described one-acre threshold. In addition, a Stormwater Report and Erosion and Sediment Control Plan are also required for new development and redevelopment projects that will add or replace 5,000 square feet or more of impervious surface and disturb less than one acre. These Stormwater Reports must address requirements of the latest version of the SWMMEW.

The City Development Engineer reviews all Stormwater Reports and SWPPPs submitted with respect to erosion and sediment control and construction stormwater management. The City Development Engineer and/or the assigned Engineering Inspector also inspect all private construction sites that meet the above-described one-acre threshold for proper installation and maintenance of erosion and sediment control BMPs. Informal compliance actions are taken by the City Development Engineer. However, if such informal actions are not successful in achieving compliance, these cases are documented and referred to the City Stormwater Coordinator for resolution.

The City Stormwater Coordinator provides training for City permitting, planning, review, inspection, and enforcement staff as needed. A new City Development Engineer was hired in 2015 and the Stormwater Coordinator spent extensive time training and working with the new Development

Engineer. The City Stormwater Coordinator keeps a training record for Engineering Division staff and ensures that appropriate staff members are receive and maintain Certified Erosion and Sedimentation Control Lead (CESCL) training. Information on construction site stormwater requirements and resources and CESCL certification and recertification classes are posted on the City's website. An email distribution list of local design professionals is maintained and information on training opportunities and the Construction Stormwater General Permit (CSWGP) is distributed to them. Records of all stormwater site plan review, inspection and informal enforcement actions are maintained by the City Development Engineer. Records pertaining to any formal enforcement actions are maintained by the City Stormwater Coordinator. Records of application for the Erosivity Waiver are maintained by the City Development Engineer. Refresher training for Engineering staff on erosion and sedimentation control on construction sites and the CSWGP will be provided in 2020.

### Activities Planned in 2020

- Review all Stormwater Reports and SWPPPs.
- Inspect all private construction sites for proper installation and maintenance of erosion and sediment control BMPs.
- Take enforcement actions as needed for failure to properly install and maintain erosion and sediment control BMPs.
- CESCL certification and recertification training for Engineering staff.
- Maintain information on construction site stormwater requirements and resources and CESCL certification and recertification classes on City website.
- Email information on training opportunities and the CSWGP to local design professionals.
- Keep records of all stormwater site plan reviews, inspections, enforcement actions, training and applications of the Erosivity Waiver.
- Provide targeted refresher training to City staff including permitting and code enforcement personnel on erosion and sediment control requirements.
- Provide refresher training to City engineering staff on erosion and sediment control requirements for City projects.

# Section 6 – Post-Construction Stormwater Management for New Development and Redevelopment

## Regulatory Requirements

The Permit requires the City to implement and enforce a program to address post-construction stormwater runoff to its MS4 from both private and public new development and redevelopment projects that disturb one acre or more or projects that are part of a common plan of development or sale that disturbs one acre or more. This element of the SWMP requires that the City: (1) implement an ordinance that requires post-construction stormwater controls, including requirements for runoff treatment, flow control, source control, and on-going long-term operation and maintenance of approved BMPs; (2) implement procedures for site plan review, including review of stormwater site plans prior to construction to ensure that plans include stormwater pollution prevention measures; (3) implement procedures for site inspection and enforcement of post-construction stormwater control measures; (4) provide adequate training for staff; (5) provide information to design professionals about training available on how to comply with permit requirements and the SWMMEW; and (6) maintain records. The Permit specifically requires the City to inspect privately-owned structural BMPs on projects that meet the above-described one-acre threshold at least once during installation and again at least once every five years after final installation to ensure adequate maintenance is being performed. The Permit also requires that the City Municipal Code allow non-structural preventive actions and source reduction approaches such as Low Impact Development (LID). In addition, the City must require all new development and redevelopment projects that meet the above-described one-acre threshold to retain runoff from the 10-year, 24-hour storm event on-site. The Permit also requires the City to develop and implement criteria to determine when it is infeasible to meet this on-site retention requirement.

## Status of Existing Activities

The City adopted a construction and post-construction stormwater ordinance (Ord. 2010-25) on May 26, 2010 that pertains to post-construction stormwater controls and includes provisions for the enforcement of non-compliance. This ordinance is codified in the WWMC Chapter 13.16 and revisions were made in 2017 (Ord. 2017-45) as part of our municipal code review project. The ordinance requires Stormwater Reports that meet requirements of the SWMMEW on all new development and redevelopment projects that add or replace 5,000 square feet or more of impervious surface. The City also requires that all such projects provide storm drainage system sufficient to retain runoff from the 25-year, 24-hour storm event on-site. In 2018, the City developed a Stormwater Design Standards Handbook which includes criteria to determine when it is infeasible to meet this on-site retention requirement. In addition, revisions were made in Titles 12, 19, 20 and 21 to allow non-structural preventive actions and source reduction approaches such as Low Impact Development (LID) techniques.

The City Development Engineer reviews all Stormwater Reports submitted for projects that meet the 5,000 square foot threshold to ensure they comply with requirements of the SWMMEW with respect to post-construction stormwater controls and retention of runoff from the 25-year, 24-hour

storm event on-site. The City Development Engineer and/or Engineer Inspector also inspect all private construction sites that meet the above-described one-acre threshold for proper installation of structural BMPs, typically incidental to other site inspections. Informal compliance actions are taken by the City Development Engineer. However, if such informal actions are not successful in achieving compliance, these cases are documented and referred to the City Stormwater Coordinator for resolution.

In 2017, we developed a program to inspect structural BMPs installed in 2011 and 2012 on new and redevelopment private projects that meet the above-described one-acre threshold as required by the Permit. If these inspections discover that adequate maintenance is not being performed, owners are required to correct the deficiencies. This inspection has continued each year since then and for 2019, included three developments with a total of 10 BMPs inspected. No deficiencies were noted at any of the sites.

The City Stormwater Coordinator provides training for City permitting, planning, review, inspection and enforcement staff as needed. A new City Development Engineer was hired in 2015 and the City Stormwater Coordinator spent extensive time training and working with him. The City Development Engineer provides assistance and information to design professionals on how to comply with permit requirements and the SWMMEW during review of stormwater site plans. An email distribution list of local design professionals is maintained by the City Stormwater Coordinator and information on post-construction stormwater requirements and training opportunities are distributed to them. Information on LID training offered by Ecology is posted on the City's website. Records of all private stormwater site plan review, inspection and informal enforcement are maintained by the City Development Engineer. Records pertaining to any formal enforcement actions are maintained by the City Stormwater Coordinator. In 2019, the City hosted an Ecology workshop attended by local development professionals that provided training for design professionals on the new SWMMEW.

Stormwater design for all City capital projects is completed in accordance with requirements of the SWMMEW either by City Engineering staff or by private consultants under contract with the City. Information and training on stormwater design is provided to City Engineering staff as needed by both the City Development Engineer and City Stormwater Coordinator. All structural BMPs are inspected during installation by either City Engineering staff or by private consultants under contract with the City. Refresher training for Engineering staff on stormwater design requirements will be provided in 2020.

### Activities Planned in 2020

- Review all Stormwater Reports to ensure design of post-construction stormwater controls comply with requirements of the SWMMEW.
- Inspect all private and public construction sites for proper installation of structural BMPs.
- Take enforcement actions as needed for failure to properly install and maintain structural BMPs.

- Inspect privately-owned structural BMPs installed in 2015.
- Provide training for City permitting, planning, design, review, inspection and enforcement staff as needed.
- Provide assistance and information to design professionals on how to comply with permit requirements and the SWMMEW during review of Stormwater Reports.
- Maintain information for design professionals on City website.
- Email information on information on post-construction stormwater requirements and training opportunities to local design professionals.
- Keep records of all stormwater site plan review, inspections, enforcement actions and training.

# Section 7 – Municipal Operations and Maintenance

## Regulatory Requirements

The Permit requires the City to implement an Operation and Maintenance Plan (O&M Plan) aimed at preventing or reducing pollutant runoff from municipal facilities and activities. The O&M Plan shall include appropriate pollution prevention/good housekeeping (PP&GH) practices for various municipal operations (e.g., storm system maintenance, municipal building maintenance, parks and open space maintenance, etc.), and shall include a schedule of inspections and record keeping requirements. The Permit also requires we implement a SWPPP for City material storage areas, heavy equipment storage areas and maintenance areas not covered by an NPDES Industrial Stormwater General Permit. Specifically, the Permit requires 95% of all City stormwater treatment and flow control facilities except catch basins be inspected at least once every two years with problem facilities inspected more frequently. In addition, spot checks of City stormwater treatment and flow control facilities are to be conducted after major storm events defined as storm events with a 10-year, 24-hour or greater recurrence interval. All City catch basins and inlets must be inspected and maintained if necessary, at least once by December 31, 2018 and every two years thereafter. In addition, the City must develop and implement a formal training program for all staff whose job functions may impact stormwater quality.

## Status of Existing Activities

The City prepared an O&M Plan for municipal operation and maintenance activities and a SWPPP for the City Service Center in 2011 that specify PP&GH practices aimed at preventing and reducing water quality impacts. The O&M Plan specifies a schedule for inspection of the entire stormwater system with high priority facilities scheduled on an annual basis and low priority facilities on a two-year cycle. In 2014, the City cleaned all catch basins and inlets and collected data on each one for entry into the City GIS database. Data collection included the size of the grate; depth of the structure; and invert elevation and pipe diameter and material of the outlet pipe. Then in 2015, Operations staff returned and inspected all of the catch basins and inlets again to see how much debris they had collected. Structures that had collected sediment to within six inches of the invert pipe were then designated high priority with all others designated as low priority. In 2016, we re-initiated our normal maintenance program.

By December 31, 2019, we completed inspection and maintenance on 50% of the basins and inlets as required by the permit. We inspected all 60 of our retention basins and infiltration swales in 2019. We believe we had no major storm events reaching the 10-year, 24-hour or greater recurrence interval of 1.8 inches. Our largest event occurred on September 8th with 0.94 inches.

Catch basin and street sweeping debris is disposed of at the City decant facility. The downtown core area, City-owned parking lots and major arterial streets are swept weekly. The remaining minor arterials and residential streets are divided into six zones which are normally completed over the course of several days or a few weeks. In 2015, the City applied for and received a grant from the Washington Department of Ecology to purchase a new, high efficiency, regenerative air sweeper to enhance its street sweeping program. This new sweeper began regular operation in July 2016. In

2018, we completed between seven to eight rounds of sweeping residential streets. In 2018, Parks Department took over maintenance responsibilities for all stormwater bio-swales and infiltration basins. In 2019, the grant awarded to the City in 2015 for the new regenerative air street sweeper ended. A total of 7,827 lane miles were swept between May 2016 and June 2019 with a total of 1,618 tons of sediment and debris collected from the City's roads during that period.

Vehicle washing is performed at the City Service Center in a covered facility and an uncovered basin with contained drainage to the sanitary sewer system. The vehicle wash basins and oil/water separators are inspected and cleaned monthly by the Operations staff. Visual inspections of stormwater treatment and flow control facilities are made yearly and spot checks are made during and after substantial storm events. City staff was trained on the O&M Plan and SWPPP in 2011 and 2014. In 2018, refresher training was conducted for Engineering and Water Divisions. Records are kept of all activities performed. Refresher training is again planned for 2020.

## Activities Planned in 2020

Routine Maintenance

Stormwater facilities will be inspected and cleaned/maintained by Streets Division Maintenance staff as described in the table below except for maintenance activities associated with the bio-swales and infiltration basins which will be done by Parks Department staff as noted in table below. All high priority facilities in Categories 1-9 will be maintained first starting at the northeast corner of the city at the beginning of the year (weather permitting) and working by quarter section south and west from there. After that, low priority facilities will be done starting again in the northeast corner of the city and working south and west until the prescribed percentage of facilities is reached. In following years, staff will pick up where they left off the previous year on low priority facilities until the scheduled maintenance cycle is completed. The current permit requires that all catch basins and inlets be inspected and cleaned if required to meet maintenance standards every two years.

| Facility Category | Maintenance Action Plan | Notes/Instructions |
|---|---|---|
| 1. Inlets (w/< or = 6" sump) and downstream Laterals | Clean all High Priority | Change to Low if <1" sediment |
| | Clean 1/2 of Low Priority | Change to High if outlet pipe is blocked |
| 2. Catch Basins (w/>6" sump) and downstream Laterals | Clean all High Priority | Change to Low if >6" to invert |
| | Clean 1/2 of Low Priority | Change to High if < or = 6" to invert |
| 3. Bubbleups (outlet side w/< or = 6" sump) | Clean all High Priority | Change to Low if <1" sediment |
| | Clean 1/2 of Low Priority | Change to High if outlet pipe is blocked |
| 4. Bubbleup Catch Basins (outlet side w/> 6" sump) and Barrel Bubbleups | Clean all High Priority | Change to Low if >6" to invert |
| | Clean 1/2 of Low Priority | Change to High if < or = 6" to invert |

| | | |
|---|---|---|
| 5. Drywells | Clean all High Priority | Change to Low if < or = 8" sediment |
| | Clean 1/3 of Low Priority | Change to High if > or = 24" sediment |
| 6a. Drywell Manholes | Clean all High Priority | Change to Low if >6" to invert |
| | Clean 1/3 of Low Priority | Change to High if < or = 6" to invert |
| 6b. Underground Infiltration Trenches assoc. w/Drywell Manholes with T or elbow | Clean at same time as Drywell Manhole if sediment w/in 6" of T or elbow or if it has an upstream cleanout catch basin | Change to High if w/in 6" of T or elbow. Change to Low if >6" to invert. |
| 6c. Underground Infiltration Trenches assoc. w/Drywell Manholes without T or elbow | Clean at same time as Drywell Manhole | Change to High if < or = 6" to invert. Change to Low if >6" to invert. |
| 7. Sedimentation Manholes | Clean all High Priority | Change to Low if >12" to invert |
| | Clean 1/3 of Low Priority | Change to High if < or = 12" to invert |
| 8. CDS Units | Clean all annually | Schedule with SW Coordinator |
| 9. Storm Laterals (Drain Collectors) | Cleaned at same time as upstream Inlet or Catch Basin | Priority changed if upstream Inlet or Catch Basin priority is changed |
| 10. Storm Mains (Collectors) | Clean 1/5 of all | |
| 11. Manholes, Outfall Manholes & Outflow Manholes | Clean at same time as upstream Storm Main Collectors | |
| 12. Street Sweeping | Downtown Core Area, Major Arterials and Parking Lots 1X/wk | |
| | Residential Streets (6 zones) 6-8X/yr | |
| 13. Roadside Ditches | Inspect all 2X/yr and remove Sediment and debris | |
| 14. Culverts | Inspect all High Priority culverts 2X/wk during leaf season and after significant storm events. Clean inlet grates as needed and jet/rod if water impounded upstream. Low Priority culverts will be cleaned in reaction to flooding complaints. | |
| 15a. Infiltration Basins: | Maintained by Parks Department | |

| | | |
|---|---|---|
| 15b. Boulders Pond Infiltration Basin (Cottonwood Rd.) | - Streets removes accumulated sediment when it exceeds 12" | |
| 16. Bio-swales | Maintained by Parks Department | |
| 17. Decant Facility | Operate in accordance with Decant Facility Operations Plan & WW County Health Dept permit | |
| | Transfer decanted loads to landfill | |
| | Inspect and clean catch basins 4X/yr | |
| 18. Weed Control | 65 days/yr | |
| 19. Oil/Water Separators<br>- Wash Rack<br><br>- Decant Facility<br>- Fleet Services | <br>- Inspect and clean 1X/mo Mar-Oct<br>- Inspect and clean 4X/yr<br>- Inspect and clean 2X/yr | |

Recordkeeping

Streets Division maintenance staff will record all routine maintenance activities listed in the Stormwater O&M Work Plan for each facility they maintain when it is completed (except for street sweeping, culverts and weed control which are discussed below). Maintenance staff record when the stormwater facility is cleaned/maintained using iPads with the Collector for Arc GIS application that maintains a historical record of all maintenance activities. If additional maintenance is required, it will be reported to the Streets Division Lead. Maintenance staff will also change the inspection priority on any specific facility from high to low or vice versa based on the criteria and standard specified under the Notes/Instructions column in the table above.

All street waste from street sweeping and the Vactor trucks is deposited in the Decant Facility at the City Service Center. Periodically, it is loaded in trucks and hauled to the City Solid Waste Landfill where it is disposed of. All material deposited and removed is recorded by Streets maintenance staff on the Streets Waste Decant Facility Daily Operating Log sheets.

Records of culvert inspection and maintenance will be kept using a list of high priority culverts. Streets Division staff will record on the list when each culvert is inspected. The culvert inlet grate will be cleaned at the time of each inspection. When the entire list of high priority culverts has been inspected, the list will be provided to the Streets Division Secretary who will then enter the inspection dates into GIS as is done for other facilities. If the culvert needs to be jetted or rodded, it will be reported to the Streets Division Lead for follow-up action. When the culvert is jetted or rodded, it will be recorded in GIS on the laptop or tablet by the maintenance staff as is done for other facilities.

The number of hours spent conducting weed control activities will be recorded on the daily activity log.

### New Permit Requirements

- Update the current O&M Plan by December 31, 2021.
- The new permit requires that the SWPPP for the City's Service Center be revised and site-specific SWPPs be implemented for all material storage locations, heavy equipment storage areas and any other locations where maintenance or vehicle washing occurs by December 31, 2022. The sites will include the Sudbury Landfill, the Municipal Golf Course and several fire stations.

# Section 8 – Compliance with Total Maximum Daily Load (TMDL) Requirements

## Regulatory Requirements

Section S7. of the Permit specifies that affected Permittees shall comply with the specific requirements identified in Appendix 2 of the Permit for stormwater discharges from a Permittee's stormwater system. For the City, Mill Creek, Garrison Creek, Russel Creek and Yellowhawk Creek have all been listed as impaired for fecal coliform bacteria. The TMDL requirements prescribed in Appendix 2 apply to all area served by the MS4 within the Cities of Walla Walla and College Place and of Walla Walla County.

## Status of Existing Activities

TMDLs for the Walla Walla Watershed have been established and approved by EPA for chlorinated pesticides and PCBs, fecal coliform bacteria, temperature, and pH and dissolved oxygen. Ecology conducted a review of these TMDLs in 2014 to determine whether stormwater, including municipal stormwater sources, were identified in any of the TMDLs. Ecology did not identify any TMDLs with established load or waste load allocations for municipal stormwater discharges covered under the Permit at that time. Since then, Ecology has identified specific requirements for fecal coliform bacteria that Permittees must take action on during the current Permit cycle.

## New Permit Requirements

The Permit now contains requirements related to the TMDL for fecal coliform from stormwater discharges including specific monitoring and public education requirements. They include:

- Inventory and inspect the stormwater system to develop a map and descriptions of known and suspected illicit connections and potential sources of fecal coliform to the MS4 by 12/31/2019.
- Develop and implement a pet waste education program for residents of the City per the schedule in Section S5.B.1. of the Permit.
- Consider during SEPA review, the potential for projects to increase runoff and sources of fecal coliform, and the need for mitigation measures to reduce these adverse impacts to the MS4 and surface waters.
- Beginning on August 1, 2020, annually select a minimum of two outfall locations suitable for sampling for bacteria and turbidity in the receiving water body at each outfall during two separate storm events (in spring and fall). The data collected should be used to trace and remedy fecal coliform sources as part of the City's IDDE program.
- Beginning January 1,2020, for each outfall drainage area investigated, submit a report to Ecology summarizing the testing results and outlining any efforts taken to reduce bacteria loadings to receiving surface water bodies.
- For any monitored outfall that has not shown improvement by June 2022, the City must also report to Ecology the actions it intends to take to further reduce or eliminate bacterial loadings through a basin wide approach of monitoring, detection and actions taken.

## Activities Planned in 2020

The City has decided to partner with Walla Walla County in its effort to monitor bacterial loadings. The City and the County have met and decided to target Yellowhawk Creek as the receiving surface water body to sample first. Both the City and County have identified outfalls on Yellowhawk Creek that will permit easy sampling and results that will benefit both jurisdictions for the purposes of creating a plan for improving bacterial loading, if necessary. The City and County will continue to meet on a regular basis to prepare for the August 1, 2020 deadline for sampling and analysis. Results from sampling by either jurisdiction will be shared so that reporting to Ecology will be easier and present a more complete picture of the loadings in the basins sampled.

# Section 9 - Monitoring and Assessment

## Regulatory Requirements

The Permit requires the City to include in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted. The City is also required to collaborate with other Eastern Washington Permittees (EWPs) covered by the Permit to select, propose, develop and conduct at least one additional study, approved by Ecology, to assess the effectiveness of stormwater management program activities and BMPs required by the Permit. Working with the other EWPs, we will revisit the approved detailed study design proposals from 2017 and decide if any of those previous studies are viable for the current Permit cycle. If yes, the City will accept one to either lead or participate in. If not, the City will have to participate in an effort to come up with new study ideas. Following this, lead entities will develop and submit detailed study design proposals for study ideas by September 30, 2022. Within three months of Ecology's approval of the detailed study design proposals, the lead entities must submit a Quality Assurance Project Plan (QAPP) for each study and then begin work within three months following approval of the QAPP. The remainder of the studies must be completed following approval of the QAPP. The final results of each study are to be reported to Ecology with recommendations for future actions based on the findings within six months after completion of the study.

## Status of Existing Activities

On June 30, 2017, lead entities developed and submitted detailed study design proposals for 8 study ideas. The City indicated it would participate in the following studies:

- Street Sweeping and Catch Basin Cleaning Comparison (City of Ellensburg – Lead)
- Mobile Contractor Illicit Discharge Education (City of Wenatchee – Lead)

The Street Sweeping and Catch Basin Cleaning Comparison Study is being led by the City of Ellensburg. This study is designed to test whether street sweeping can significantly reduce sediment accumulation in catch basins and thereby reduce the frequency of required catch basin maintenance. In 2018, the City of Ellensburg began data collection which continued into 2019. With the data collection phase of the study completed, Ellensburg has begun the data reporting and reporting writing phase of the project. The report on the results should be completed in 2020 for submission to Ecology for review.

The Mobile Contractor Illicit Discharge Education Study is being led by the City of Wenatchee. This goal of this study is to assess the effectiveness of the current education and outreach program in eastern Washington for carpet cleaning businesses. The study involves a phone survey of carpet cleaning businesses in the Wenatchee Valley where this program is being implemented as well as the same phone survey of carpet cleaning businesses in the Tri-Cities area where the program has not been implemented. This study was completed in 2019 and moved on to the report writing phase. The report on the results should be completed in 2020 for submission to Ecology for review.

## Activities Planned in 2020

- Continue working with the City of Ellensburg on Street Sweeping and Catch Basin Cleaning Comparison Study and the City of Wenatchee on the Mobile Contractor Illicit Discharge Education Study as needed.
- Participate in meetings with EWPs to decide about using an approved detailed study design proposal or participate in a process to identify new study proposals.
- Begin the process of developing and implementing a pet waste education program for residents of the City per the schedule in Section S5.B.1. of the Permit. Meet regularly with regional partners (Walla Walla County and City of College Place) to formulate a unified plan.
- After August 1, 2020, collect bacteria and turbidity samples in the receiving water body at a minimum of two outfall locations suitable for sampling during two separate storm events (in spring and fall).

# Section 10 - Reporting and Recordkeeping

## Regulatory Requirements

The Permit requires the City to prepare and submit Annual Reports to Ecology by March 31 of each year. The reports must include the most current version of the City's SWMP Plan and status of compliance with the various conditions outlined in the permit for the previous calendar year. The Annual Reports must include: (1) a copy of the updated SWMP Plan for the current year; (2) the status of implementation of each SWMP component; (3) an assessment of the City's progress in meeting the minimum performance standards; (4) a description of activities implemented, including the number and type of inspections, enforcement actions, PE&O activities, and illicit discharges detected and eliminated; and (4) other reporting requirements. The Permit also requires the City to keep all records related to the Permit for at least five years, make those records available to the public and provide a copy of the most recent Annual Report to any individual or entity upon request.

## Status of Existing Activities and Needs

The City has developed and implemented a formal on-going process for gathering, recording, maintaining, and using information to track the development and implementation of their SWMP. Recordkeeping procedures and processes are described for each SWMP component in previous sections. The City has not received a request for any records related to the Permit or any Annual Reports for at least four years.

## Activities Planned in 2020

- Prepare the 2020 SWMP Plan by March 31, 2020.
- Prepare and submit the 2019 Annual Report to Ecology by March 31, 2020.
- Post the 2019 Annual Report and 2020 SWMP Plan on City website by May 31, 2020.
- Make permit-related records and copies of the Annual Report available upon request.

# Section 11 – UIC Program

## Regulatory Requirements

As explained in Section 1, the UIC program requirements do not come from the Permit. This program is required by the federal SDWA and is intended to protect underground sources of drinking water from contamination by waste fluids, including the infiltration of polluted stormwater. Ecology adopted revisions to the Washington State UIC Rule (Chapter 173-218 WAC) on January 3, 2006 which went into effect on February 3, 2006. In 2019, Ecology revised its technical guidance document for UIC wells entitled *2019 Updates to UIC Well Requirements* (February 2019, Publication #19-10-014) and updated the UIC well guidance and BMP requirements in the newly revised Stormwater Management Manual for Eastern Washington (SWMMEW) dated August 2019 (Publication #18-10-044).

UIC wells constructed on or after February 3, 2006 are considered new wells and must be registered prior to use. UIC wells used to manage stormwater that were constructed prior to February 3, 2006 are considered existing wells under the UIC regulation and have different requirements than new wells. Specifically, existing wells need to be registered (if not already registered) and a well assessment is required to determine if they pose a high threat to groundwater. The owner of a UIC well needs to submit documentation to Ecology that shows the stormwater flowing to the UIC well does not pose a high threat to groundwater. Registration and well assessment timelines for existing wells are dependent on the number of wells owned and operated by the City. Since there are more than 50 wells owned by the City, the registration and well assessment deadlines were February 3, 2011 and 2013, respectively (5 and 7 years from the effective date of the rule revision). However, an extension from Ecology could be requested if additional time was needed. Wells determined to be a high threat to groundwater (e.g., completed in groundwater) must be retrofitted or decommissioned to be protective of groundwater quality.

## Status of Existing Activities

The City requested an extension to complete the registration process, completed the inventory work in November 2011 and completed the registration of all new and existing City-owned UIC wells in December 2011. The registration process involved providing information on: the location of each well (latitude and longitude), EPA well type, status of the well (active, closed, etc.), UIC construction type, depth of UIC well, proximity to surface water and drinking water wells, zoning, and proximity to a groundwater protection area. Generally, the bottom of each UIC well is required to be at least five feet above the seasonal high groundwater level. For UIC wells constructed in gravelly, well-drained soils, this minimum depth to seasonal high groundwater levels increases to 25 feet.

In November 2012, another extension was requested and approved to complete the UIC assessment. Under contract with the City, URS Corporation developed a risk based UIC assessment methodology which was applied to all UIC wells within the City. This methodology utilized information such as local soil conditions (soil type, treatment capacity, etc.), groundwater depths, land use, critical/sensitive areas, and existing/proposed source control activities. This work was completed and documented in the Assessment of Underground Injection Control Facilities

(December 12, 2013). The report identified six existing UIC wells determined to have a high risk to groundwater and require retrofitting or decommissioning, four existing UIC wells that pose a moderate risk and are recommended for longer term retrofits and an additional 89 new and existing UIC wells that need further investigation of seasonal high groundwater levels to confirm or update their preliminary risk level. Cut sheets were prepared for the six high and four moderate risk UIC wells identifying preliminary retrofit solutions and cost estimates. Upon further review, two of the six high risk UIC wells were examined and determined not to be UICs and have been removed from the list. The remaining four high risk UIC wells located on Avery St. are included in the City's Capital Facilities Plan (CFP) and scheduled for retrofit in the future. The four moderate risk UIC wells are also in the City's CFP and scheduled in the future.

### Activities Planned in 2020

- Review available geotechnical information on seasonal high groundwater levels on projects in vicinity of the 89 new and existing UIC wells identified in the 2013 UIC assessment to determine vertical separation to seasonal high groundwater.
- Visually inspect UIC wells whose vertical separation to seasonal high groundwater cannot be determined from available geotechnical information above during March and April.
- Update preliminary risk level for the 89 UIC wells identified in the 2013 UIC assessment where vertical separation to seasonal high groundwater can be determined from available geotechnical information and monitoring.
- Update inventory of UIC wells with registration status and risk assessment.
- Revise CFP to include any of the 89 UIC wells that are determined to be of high risk.

# Section 12 – Administration of the Stormwater Utility

## Regulatory Requirements

There are no regulatory requirements for this component of the program. This component includes establishment of stormwater utility rates, the rate structure and policy, the methodology for determining stormwater utility fees for properties as well as the calculation of stormwater utility fees for properties.

## Status of Existing Activities and Needs

The City adopted a stormwater utility ordinance (Ord. 1999-32) on November 17, 1999 that set forth policies and the rate structure for the stormwater utility. This ordinance is codified in the WWMC Chapter 13.06. Based on this, the stormwater utility fee assessed against each parcel is based on the amount of impervious surface on the parcel. The utility rate is based on Equivalent Residential Units (ERUs) which equals 3,000 square feet of impervious surface. All parcels developed as single-family residences are charged a flat rate of one ERU. The rates for multi-family residential parcels with four or fewer units are charged at a rate of one-half ERU per unit. For all other properties, the amount of impervious surface on the parcel is measured and divided by 3,000 to determine the ERUs for that parcel.

When the utility was established, an inventory of all properties with more than four residential units was completed and impervious surface areas were calculated based on aerial photography. No credits were applied initially for on-site stormwater facilities and it appears that some impervious surfaces (i.e., compact gravel) were not included in the calculations. As new development or redevelopment occurred, ERUs were to be recalculated but it appears this was not completed in all cases. Standard Operating Procedures (SOPs) were developed in 2016 to formalize this. The methodology used to give credit for on-site stormwater facilities is somewhat time-consuming and needs to be clarified. In addition, the public and City Council expressed some concerns with the methodology for determining stormwater rates primarily with commercial properties during adoption of 2016-2021 stormwater utility rates completed in 2015. In response to this, City staff were directed by City Council to investigate alternative rate structures to ensure it is fair and equitable to all ratepayers.

Aerial photography of the City was updated in 2016. In 2017, GIS staff digitized impervious surface areas for all parcels in the City based on 2016 aerial photography. A random sample of residential properties indicated the average impervious surface at such properties was approximately 3,500 square feet. In 2018, this information was provided to FCS Group for analysis and development of recommendations for changes in the utility rate structure and policy. In addition, the City provided FCS with any changes resulting from new or redevelopment since the 2016 aerial photography.

In 2019, the City completed work on the first phase of the Stormwater Utility Rates Study. This included getting City Council approval to pursue a path for securing a more fair and equitable utility rate structure for the upcoming 2022-2027 cycle. City Council adopted an ordinance which abolished the process of providing stormwater rate credits to non-residential customers and directed

staff to implement a 5-year phase-in process for re-assessing all existing non-commercial customers. Direction was also given to base the assessments on a parcel ownership basis instead of the water meter account method currently used. Work will begin in 2020 to start this process and will rely heavily on outcomes form concurrent projects such as the processing of new orthophotography images for up to date GIS maps (needed for measuring current amounts of impervious surfaces on individual parcels) and the migration from EDEN to MUNIS (needed for the Utility Billing portion of the process) on a City wide scale which should be completed in 2020 and 2021 respectively.

### Activities Planned in 2020

- Develop and Implement a Communications Plan to keep the general public informed on progress of the Stormwater Utility Rate Study
- Work with the consultant to formulate a stormwater utility rate structure that can be fairer and more equitable for the 2022- 2027 cycle
- Identify a list of all non-residential customers that need to be contacted regarding the future changes to the rate structure and initiate a public comment process for notification.

# Section 13 – Capital Improvement Projects

## Regulatory Requirements

There are no regulatory requirements for this component of the program.

## Status of Existing Activities and Needs

The City completed its Comprehensive Stormwater Management Plan in 2015. This identified capital improvement projects to address problem drainage areas, replacement of substandard catch basins and UIC retrofit projects that need to be completed. These were included and prioritized in a six-year Capital Facilities Plan. In addition, a few areas were identified during this process where the stormwater system was discharging to the sanitary sewer. The City completed work in 2015 to construct new stormwater facilities to eliminate these connections to the sanitary sewer.

The City has also been working to reduce direct discharges to surface waters on IRRP and TBD projects by constructing new groundwater infiltration facilities. In 2015, new infiltration facilities were constructed as part of the Rose Street TBD project. In 2016, new stormwater infiltration trenches were constructed at Madison and McKinley Streets as part of the Alder Street IRRP Project to eliminate a portion of the stormwater runoff that currently discharges directly to Mill Creek. Also that year, a new drywell was constructed at 3rd Avenue as part of the Chestnut IRRP Project to eliminate a portion of the stormwater runoff that currently discharges directly to Garrison Creek.

## Activities Completed in 2019

- Isaacs Avenue IRRP Phase 2 Project. This project includes the replacement of water and sewer lines and roadway reconstruction from Division Street to Wilbur Avenue. This project is being designed to include a new bio-infiltration swale at the Division Street intersection to eliminate stormwater runoff that currently discharges directly to Mill Creek. It will also include new stormwater infiltration facilities wherever possible to eliminate stormwater runoff that also currently discharges directly to Mill Creek. These stormwater retrofits will be partially funded by a grant awarded by Ecology. This first half of this project (Division Street to Roosevelt Street) was completed on schedule in November 2019. Work on the second half of this project (Roosevelt Street to Wilbur Ave) will continue in 2020.
- Tietan/Sunset IRRP Project. This project includes the replacement of water and sewer lines and roadway reconstruction on Tietan Street from 4th Avenue to Modoc Street and on Sunset Drive from Tietan Street to Lodge Drive. New infiltration facilities will be constructed to replace existing direct piped discharges to Stone Creek.
- Howard/Bryant Bridge Replacement Project. This project will replace the current bridge over Garrison Creek and upgrade stormwater facilities to remove sediment and pollutants draining not only from the project corridor but the contributing drainage basins to the east.

## Activities Planned in 2020

- Isaacs Avenue IRRP Phase 2 Project. This project includes the replacement of water and sewer lines and roadway reconstruction from Division Street to Wilbur Avenue. This project is being designed to include a new bio-infiltration swale at the Division Street

intersection to eliminate stormwater runoff that currently discharges directly to Mill Creek. It will also include new stormwater infiltration facilities wherever possible to eliminate stormwater runoff that also currently discharges directly to Mill Creek. These stormwater retrofits will be partially funded by a grant awarded by Ecology.

- S 3rd Street and Maple Street IRRP Project. This project includes the replacement of water and sewer lines and roadway reconstruction on S 3rd Street and Maple Street. New infiltration facilities will be constructed to reduce the amount of runoff discharging to Bryant Creek.

### Future Stormwater Projects

- Stormwater CIP Projects.
  - E. Oak & N. Spokane Streets: A failed drywell will be replaced to eliminate ponding of stormwater at this intersection.
  - N. Clinton Street: An infiltration facility will be constructed between E. Sumach and US 12 to eliminate ponding in N. Clinton Street.
  - Avery Street Drywell Retrofit: Four drywells determined to be a high risk to groundwater will be replaced with catch basins, sedimentation manholes to underground infiltration trenches.
  - 4th Avenue & Donald Street: Catch basins and a new drywell will be constructed at this intersection to eliminate a drainage problem at this intersection.
  - N. Madison & Pearson Streets: Catch basins will be replaced to eliminate a drainage problem at this intersection.

# Public Education and Outreach Activities Calendar - 2019

| Date(s) | Event | Presenters | Target Audience | Description |
|---|---|---|---|---|
| On-going | Message on Street Sweeper | City of Walla Walla | General Public | Basic message that storm drains go directly to our surface waters and Only Rain Down the Drain |
| On-going | Message on City Stormwater Website | City of Walla Walla | General Public | Information on City's Stormwater Program including messaging on Spill Reporting, Business Information, Construction Contractors, and FAQs |
| Feb 22 | Email | City of Walla Walla Stormwater Coordinator | Design Professionals | Send notice to City's Stormwater e-notice list regarding update of Stormwater Management Manual for Eastern Washington. |
| Feb 22 | Email | City of Walla Walla Stormwater Coordinator | Water Wastewater Advisory Committee | Send notice to City's Stormwater e-notice list regarding update of Stormwater Management Manual for Eastern Washington. |
| Feb 27 | E-Notice | City of Walla Walla Stormwater Coordinator | General Public | Send notice to City's Stormwater e-notice list regarding update of Stormwater Management Manual for Eastern Washington. |
| Feb 28 | E-Notice | City of Walla Walla Stormwater Coordinator | General Public | Send notice to City's Stormwater e-notice list regarding completion and posting of 2018 Stormwater Annual Report and 2019 Stormwater Management Program Plan |
| May 18 | Return to the River Festival | Stormwater Coordinator | General Public | Information on City's Stormwater Program including messaging on Spill Reporting, Pet Waste Problems, IDDE, and Mapping of the City's Stormwater System |
| May 20 | Training | Doug Howie, Ecology | Design Professionals, Developers, Construction Contractors | Training on the updated Stormwater Management Manual for Eastern Washington including UIC drywells |
| May 21-22 | National Public Works Week Stormwater Presentations for Local Elementary School Children | Stormwater Coordinator | 340 Third Graders from six local Elementary Schools | Information on City's Stormwater Program including IDDE video, Pet Waste Management, Storm Drain Marking |
| Jul & Aug | Downtown Food Establishments FOG Inspections | Stormwater Coordinator, FOG Coordinator | Downtown Food Establishments w/ history of Stormwater Violations | Visited 10 Establishments that serve food and had been written up in the past for Stormwater Violations. Spoke to managers and staff about City's Stormwater Program and handed out placards and other informational material describing acceptable grease handling, mat cleaning and mop water disposal, grease trap cleaning and trash disposal |

Appendix A

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|---|---|---|---|---|
| Jul | Direct Mailing to Utility Bill Recipients | Message printed on Utility Bills | City Residents who received a Utility Bill for water, sewer, garbage or stormwater services | Healthy Household Habits for Clean Stormwater message. Only rain down the drain, don't drip and drive, use a commercial car wash, use pesticides sparingly, keep grass clippings in your yard, pick up after your pet |
| Jul 7 | City Council Work Session | Director of Parks & Recreation Department, Public Works Director | City Council, General Public | Discussion with City Council about funding of Urban Forestry Program using stormwater utility funds |
| Sep 11 | City Council Meeting | Director of Parks & Recreation Department, Public Works Director | City Council, General Public | Approved Ordinace to include Green Stormwater Infrastructure and Urban Forestry as part of the City's Stormwater Utility |
| Sep 23 | City Council Work Session | Public Works Director, Stormwater Coordiantor | City Council, General Public | Discussion with City Council about re-structuring Stormwater Utility rates to more equitably distribute program costs to all rate payers |
| Nov 20 | City Council Meeting | Public Works Director | City Council, General Public | Approved Ordinace to modify municipal code to improve the fairness and equity of stromwater rates with the next financial plan proposed in 2022-2027. Elements of the plan include phasing out credits for non-residential customers, adjusting the area of the ERU and establishing a per account base charge. |

In addition to the specific events and activities described above, information on the stormwater system, the impacts of stormwater and illicit discharges to our receiving waters and the importance of protecting water quality in our receiving waters is provided to the general public, businesses and contractors when responding to and investigating reports of illicit discharge reports. Also, information on the stormwater system, stormwater design requirements and information on requirements to prevent erosion and sedimentation on construction sites is provided to design engineers and construction contractors during pre-application meetings, site plan review and construction inspections.

# Public Involvement Activities Calendar - 2019

| Date(s) | Event | Presenters | Target Audience | Description |
|---|---|---|---|---|
| Jan 16 | Water and Wastewater Advisory Committee Meeting | City of Walla Walla Stormwater Coordinator | Water and Wastewater Advisory Committee | Update on Isaacs IRRP Phase 2 Grant, Park IRRP Grant, SW Utility Rate Study, SW Management Program Plan, SW Annual Report 2018, 2018 Street Sweeping and Catch Basin O&M stats |
| Mar 1 | 2018 Stormwater Annual Report | City of Walla Walla Stormwater Coordinator | Public e-notification list | Sent notice that 2018 Annual Report was complete and posted on City website |
| Mar 15 | 2019 Stormwater Management Program Plan Update | City of Walla Walla Stormwater Coordinator | Public e-notification list | Posted 2019 Stormwater Management Program Plan on City website |
| Apr 17 | Water and Wastewater Advisory Committee Meeting | City of Walla Walla Stormwater Coordinator | Water and Wastewater Advisory Committee | Update on Isaacs IRRP Phase 2 Grant, Park IRRP Grant, SW Utility Rate Study, SW Management Program Plan, EW Stormwater Manual Update, SW Annual Report 2018 |
| May 15 | Water and Wastewater Advisory Committee Meeting | City of Walla Walla Stormwater Coordinator | Water and Wastewater Advisory Committee | Update on Isaacs IRRP Phase 2 Grant, Park IRRP Grant, SW Utility Rate Study, SW Management Program Plan, EW Stormwater Manual Update, SW Annual Report 2018 |
| Sep 18 | Water and Wastewater Advisory Committee Meeting | City of Walla Walla Stormwater Coordinator | Water and Wastewater Advisory Committee | Update on Isaacs IRRP Phase 2 Grant, Park Street IRRP Grant, SW Utility Rate Study, SW Management Program Plan, EW Stormwater Manual Update, SW Permit Appeal Status |
| Oct 16 | Water and Wastewater Advisory Committee Meeting | City of Walla Walla Stormwater Coordinator | Water and Wastewater Advisory Committee | Update on Isaacs IRRP Phase 2 Grant, Park Street IRRP Grant, SW Utility Rate Study, SW Management Program Plan, SW Permit Appeal Status |

Appendix B